



TRUCK AND BUS TYRE | **TECHNICAL MANUAL**

REGROOVING GUIDE

Regrooving introduction
Regrooving technical data

Regrooving introduction

INTRODUCTION

A regrooved tyre means a tyre, either new or retreaded, on which a tread pattern has been produced by cutting into the tread in accordance with the tyre manufacturer's recut tread pattern. Recut tread patterns for Hankook tyres are contained in this manual.

Regrooving of truck tyres requires fully trained operators:

- Use only regrooving tools with electrically heated blades.
- Determine the blade setting depth for each individual tyre by referring to the following tables.
- Set the blade in the cutter head to the specified depth.
- While regrooving, hold the cutter so that the underside of the cutting head is flat against the tread surface. Heating of the blade starts automatically as the blade penetrates the rubber.

A minimum depth of remaining undertread rubber is required to avoid:

- Damage of the top steel belt
- Rib tearing caused by groove cracking
- Stone damage

After regrooving, the tyre should be free of any defects (cracks, separations exposed ply or cord) visible on either the mounted or demounted tyre.

TECHNICAL REQUIREMENTS

The tyre must be demounted from the rim before regrooving.

Inspection :

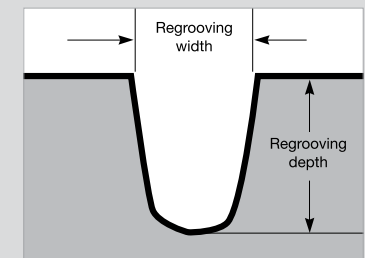
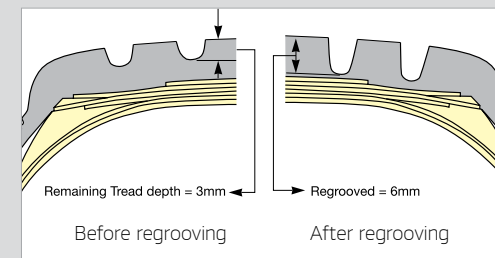
- Before regrooving check there is no damage on any part of the tyre.
- Remove stones and any other foreign objects such as nails from the tread which may have embedded into the grooves. Repair if necessary.
- Particular care should be exercised in selecting a tyre for regrooving where the tread area is damaged in anyway (eg: chipping, tearing and cutting due to abnormal operating conditions)
- Where a tyre has worn abnormally it may be possible to regroove that part of the worn tyre, provided that a sufficient amount of the original groove is visible before regrooving.

It is recommended that the minimum remaining tread depth be between 2mm and 3mm before regrooving. The tread depth should be measured around the circumference at 4 places to find the minimum remaining depth. Set the cutter blade for the recommendations as shown in this publication.

Please make sure that you regroove Hankook tyres Steel Radials to the patterns, depths and widths recommended in this manual to ensure good service from your tyres.

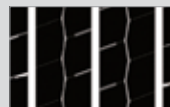
After regrooving, your tyre should be free from defects. It is most important to ensure that the belts under the tread have not been exposed.

REGROOVING RECOMMENDATIONS



Regrooving technical data

LONG HAUL



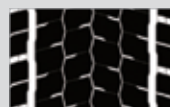
New tread regrooved tread

SRS	Size	LI/SS	Type		Tread Depth		Regrooving	
			T/T	T/L	m/m	Depth	Width	
TUBELESS								
55	385/55R22.5	160K		*	11.6	3	6~9	

AL20w

SRS	Size	LI/SS	Type		Tread Depth		Regrooving	
			T/T	T/L	m/m	Depth	Width	
TUBELESS								
60	295/60R22.5 *			*				
	315/60R22.5 *			*				

* Available in Q2/2019



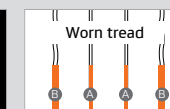
New tread regrooved tread

SRS	Size	LI/SS	Type		Tread Depth		Regrooving	
			T/T	T/L	m/m	Depth	Width	
TUBELESS								
70	315/70R22.5	154/150L		*	14.6	3	6	

DL20w

SRS	Size	LI/SS	Type		Tread Depth		Regrooving	
			T/T	T/L	m/m	Depth	Width	
TUBELESS								
80	315/80R22.5	156/150L		*	15.0	3	5~7	
70	315/70R22.5	154/150L		*	14.6	3	6	
60	295/60R22.5 **			*				
	315/60R22.5 **			*				

** Available in Q3/2019



New tread regrooved tread

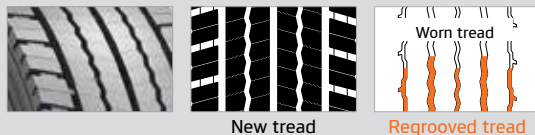
SRS	Size	LI/SS	Type		Tread Depth		Regrooving	
			T/T	T/L	m/m	Depth	Width	
TUBELESS								
65	385/65R22.5	160K		*	12.2	3	9~11	
55	385/55R22.5	160K		*	11.4	3	A6~8 / B12~14	
50	435/50R19.5	160J		*	8.7 / 10.2	3	A2.5 / B7~9	
45	445/45R19.5	160K		*	8.7 / 10.2	3	A2.5 / B7~9	



New tread regrooved tread

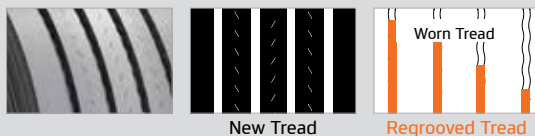
SRS	Size	LI/SS	Type		Tread Depth		Regrooving	
			T/T	T/L	m/m	Depth	Width	
TUBELESS								
80	315/80R22.5	156/150L (154/150M)		*	13.5	3	8~10	
70	315/70R22.5	156/150L		*	14.5	3	8~10	
65	385/65R22.5	160K		*	12.2	3	6~9	
60	295/60R22.5	150/147L		*	13.6	3	8~10	
	315/60R22.5	154/148L		*	13.5	3	8~10	
50	355/50R22.5	156L		*	13.5	3	9~11	

LONG HAUL



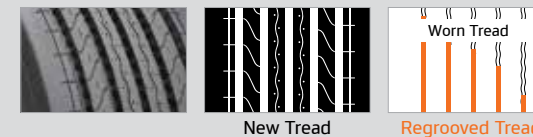
SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
80	315/80R22.5	156/150L (154/150M)	*		17.7	3	8~10
60	295/60R22.5	150/147K	*		18.9	3	5~7
	315/60R22.5	152/148L	*		19.5	3	8~10
55	295/55R22.5	147/145K	*		10.4	3	7~9
45	315/45R22.5 ***	147/145L	*		17.5	3	6~8

*** Available in Q1/2020



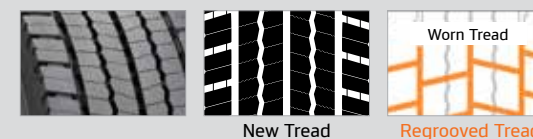
SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
75	215/75R22.5	135/133J	*		10.2	3	9
	235/75R22.5	143/141J	*		10.7	3	10
70	245/70R17.5	143/141J (146/146F)	*		10.7	3	10
	265/70R19.5	143/141J	*		10.7	3	10
65	385/65R22.5	160K	*		14.5	3	10~12
50	435/50R19.5	160J	*		12.6	3	12~14
40	455/40R22.5	160J	*		13.5	3	10~12

AL10 e-cube



SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
	12R22.5	152/148L	*		14.5	3	6~8
80	295/80R22.5	152/148M	*		13.5	3	8~10
70	255/70R22.5	140/137M	*		13.1	3	8~10
	275/70R22.5	148/145M	*		15.0	3	8~10
	305/70R22.5	152/148L	*		13.5	3	8~10

DL10 e-cube



SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
80	295/80R22.5	152/148M	*		17.5	3	10~12
70	275/70R22.5	148/145M	*		18.5	3	10~12

LONG HAUL



New tread

Regrooved tread

SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
70	275/70R22.5	152/148J		*	12.6	3	10~12
65	445/65R22.5	169K		*	16.5	3	12~14
45	445/45R19.5	160J		*	13.5	3	8~10

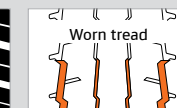
COACH



New tread

Regrooved tread

SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
80	295/80R22.5	154M		*	14.1	3	8~10
	315/80R22.5	156/150L		*	14.6	3	8~10



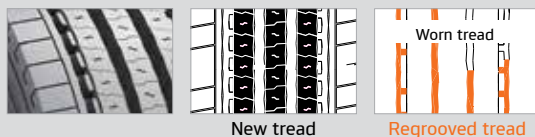
New tread

Regrooved tread

SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
80	295/80R22.5	154/149M		*	17.9	3	6~8

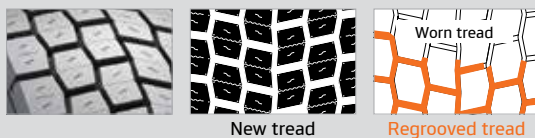
REGIONAL HAUL

**SMART^{LEX}
AH31**



SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
80	12R22.5	152/149L		*	16.0	3	9~11
	295/80R22.5	152/148M(154/149L)		*	17.5	3	9~11
	315/80R22.5	156/150L		*	17.5	3	9~11
70	315/70R22.5	156/150L		*	15.5	3	9~11
	275/70R22.5	148/145M		*	15.0	3	7~11
65	385/65R22.5	164K		*	15.5	3	9~11
	385/65R22.5	160K(158L)		*	15.5	3	9~11
60	315/60R22.5	154/148L		*	13.1	3	8~10
55	385/55R22.5	160K		*	15.0	3	6~8
50	335/50R22.5	156L		*	13.6	3	6~8

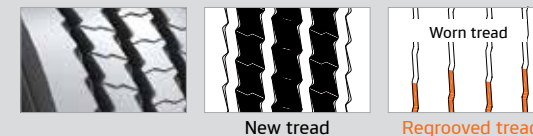
**SMART^{LEX}
DH31**



SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
80	295/80R22.5	152/148M		*	20.5	3	6~8
	315/80R22.5	156/150L		*	20.5	3	6~8
70	315/70R22.5	154/150L		*	19.5	3	9~11
	275/70R22.5**	148/145M		*	17.7	3	6~8
60	295/60R22.5	150/147K		*	18.9	3	4~6
	315/60R22.5	152/148L		*	19.4	3	5~7

**Available in Q3/2018

**SMART^{LEX}
TH31**



SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
	11R22.5	148/145L		*	11.5	3	6~8
70	275/70R22.5	152/148J		*	12.6	3	6
65	425/65R22.5	165K		*	15.5	3	6~8
	385/65R22.5	160K		*	16.0	3	7.66
55	385/55R22.5	160K (158L)		*	14.6	3	6~8
50	435/50R19.5	160J		*	12.5	3	6~8
40	455/40R22.5*	160J					

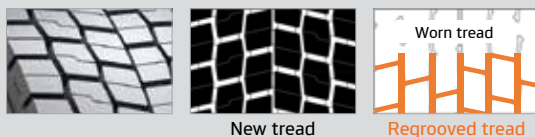
* available in Q2/2019

AH33

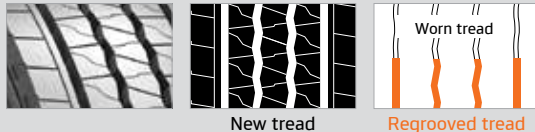


SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
	10R22.5	141/139M		*	13.5	3	6~8
	11R22.5	148/145L		*	16	3	6~8
	12R22.5	152/148L		*	16.5	3	7~9
	13R22.5	156/150L		*	16.5	3	6~8

REGIONAL HAUL



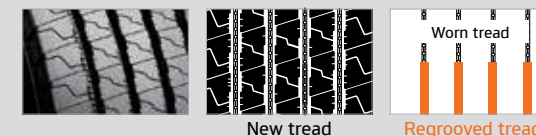
SRS	Size	LI/SS	Type		Tread Depth	Regrooving	
			T/T	T/L	m/m	Depth	Width
TUBELESS							
	12R22.5	152/149L		*	24	3	4~5



SRS	Size	LI/SS	Type		Tread Depth	Regrooving	
			T/T	T/L	m/m	Depth	Width
TUBELESS							
75	8.5R17.5	121/120L		*	12.1	3	4~6
	9.5R17.5	131/129L		*	13.6	3	4~6
	8R19.5	124/122L		*	12.5	3	4~6
	205/75R17.5	124/122M		*	12.1	3	5~7
	215/75R17.5	126/124M		*	12.6	3	5~7
	215/75R17.5	128/126M		*	12.6	3	5~7
70	225/75R17.5	129/127M		*	12.1	3	6~8
	235/75R17.5	132/130M		*	12.1	3	7~9
	245/70R17.5	136/134M		*	12.1	3	7~9
	265/70R17.5	140/136M		*	12.6	3	7~9
	245/70R19.5	136/134M		*	13.6	3	7~9
	265/70R19.5	140/138M		*	13.1	3	7~9
	285/70R19.5	146/144M		*	13.1	3	5~7
	305/70R19.5	148/145M		*	14.6	3	6~8



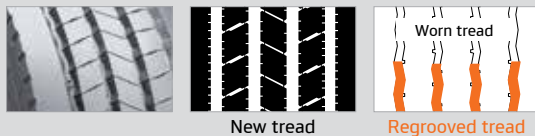
SRS	Size	LI/SS	Type		Tread Depth	Regrooving	
			T/T	T/L	m/m	Depth	Width
TUBELESS							
75	8.5R17.5	121/120L		*	12.1	3	5~7
	9.5R17.5	131/129L		*	15.0	3	5~7
	205/75R17.5	124/122M		*	13.1	3	5~7
	215/75R17.5	126/124M		*	13.0	3	6~8
	225/75R17.5	129/127M		*	12.6	3	6~8
70	235/75R17.5	132/130M		*	12.6	3	6~8
	245/70R17.5	136/134M		*	13.1	3	6~8
	265/70R17.5	139/136M		*	15.0	3	5~7
	245/70R19.5	136/134M		*	13.1	3	5~7
	265/70R19.5	140/138M		*	13.0	3	5~7
	285/70R19.5	146/144M		*	14.1	3	6~8
	305/70R19.5	148/145M		*	15.5	3	6~8



SRS	Size	LI/SS	Type		Tread Depth	Regrooving	
			T/T	T/L	m/m	Depth	Width
TUBELESS							
	8R17.5	117/116L		*	13.0	3	8~10
	10R22.5	141/139L		*	13.5	3.5	11~13
	13R22.5	156/150L		*	16.5	3.5	11~13
TUBE TYPE							
	1000R20	147/143L		*	16.0	3	8~10
	1100R20	150/146L		*	16.0	4	8~10

REGIONAL HAUL

AH22



SRS	Size	LI/SS	Type		Tread Depth	Regrooving	
			T/T	T/L	m/m	Depth	Width
TUBELESS							
	11R22.5	148/145L		*	16.5	3	8~10
	12R22.5	152/148L		*	16.5	3	8~10

DH03



SRS	Size	LI/SS	Type		Tread Depth	Regrooving	
			T/T	T/L	m/m	Depth	Width
TUBELESS							
	11R22.5	148/145M		*	16.5	3	11~13
80	295/80R22.5	152/148M		*	13.5	3	11~13

DH16



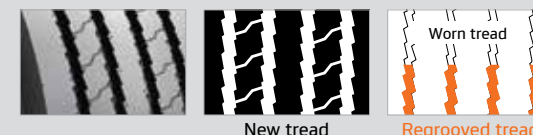
SRS	Size	LI/SS	Type		Tread Depth	Regrooving	
			T/T	T/L	m/m	Depth	Width
TUBELESS							
	12R22.5	152/149K		*	18.9	3	8~10

DH05



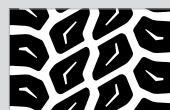
SRS	Size	LI/SS	Type		Tread Depth	Regrooving	
			T/T	T/L	m/m	Depth	Width
TUBELESS							
	8R17.5	117/116L		*	14.0	3	6~8
	11R22.5	148/145L		*	21.0	3	10~12
	12R22.5	152/148L		*	22.5	3	10~12
80	295/80R22.5	152/148M		*	23.0	3	10~12
	315/80R22.5	154/150M (156L)		*	23.5	3	10~12
70	315/70R22.5	154/150L		*	19.5	3	10~12
TUBE TYPE							
	1000R20	147/143L		*	22.5	3	8~10
	1100R20	150/146L		*	22.5	3	10~12

TH22



SRS	Size	LI/SS	Type		Tread Depth	Regrooving	
			T/T	T/L	m/m	Depth	Width
TUBELESS							
	9.5R17.5	143/141J		*	13.5	3	5~7
	11R22.5	148/146L		*	12.6	3	6~8
75	215/75R17.5	135/133J		*	12.0	3	6~8
	235/75R17.5	143/141J		*	12.5	3	6~8
70	245/70R17.5	143/141J (146/146F)		*	12.5	3	6~8
	245/70R19.5	141/140J		*	14.0	3	6~8
	265/70R19.5	143/141J		*	13.5	3	7~9
	285/70R19.5	150/148J		*	14.0	3	6~8
65	205/65R17.5	129/127K(132/132F)		*	11.6	3	6~8
	425/65R22.5	165K		*	16.5	3	8~10
55	385/55R22.5	160K (158L)		*	15.0	3	12~14

MIXED SERVICE (ON AND OFF-ROAD)



New tread

Regrooved tread

SRS	Size	LI/SS	Type		Tread Depth		Regrooving	
			T/T	T/L	m/m	Depth	Width	
TUBELESS								
70	265/70R19.5	143/141J	*		16.0	3	8~10	
	275/70R22.5	148/145K	*		18.0	3	8~10	
65	425/65R22.5	165K	*		18.5	3	10~12	
	445/65R22.5	169K	*		18.9	3	10~12	

AM15+

TUBELESS

65	385/65R22.5	160K (158L)	*		18.0	3	12~14	
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New tread

Regrooved tread

SRS	Size	LI/SS	Type		Tread Depth		Regrooving	
			T/T	T/L	m/m	Depth	Width	
TUBELESS								
80	315/80R22.5 *	156/150K	*		16.3	3	10~12	

* available in Q2/2019



New tread

Regrooved tread

SRS	Size	LI/SS	Type		Tread Depth		Regrooving	
			T/T	T/L	m/m	Depth	Width	
TUBELESS								
	10R22.5	144/142K	*		15.0	3	A9~11 / B8~10	
	11R22.5	148/145K	*		22.5	3	12~14	
	12R22.5	152/149K	*		18.9	3	8~10	
	13R22.5	156/150K	*		18.0	3	A13~15 / B10~12	
80	295/80R22.5	152/148K (154/150J)	*		17.0	3	A11~13 / B8~10	
	315/80R22.5	156/150K	*		17.0	3	A12~14 / B9~11	



New tread

Regrooved tread

SRS	Size	LI/SS	Type		Tread Depth		Regrooving	
			T/T	T/L	m/m	Depth	Width	
TUBELESS								
95	325/95R24	162/160K	*		18.4	4	7~9	



New tread

Regrooved tread

SRS	Size	LI/SS	Type		Tread Depth		Regrooving	
			T/T	T/L	m/m	Depth	Width	
TUBELESS								
80	315/80R22.5 *	156/150K	*		19.7	3	5~13	

* available in Q2/2019

MIXED SERVICE (ON AND OFF-ROAD)



SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
	11R22.5	148/145K		*	23.5	3	7~11
	12R22.5	152/148K		*	22.5	3	7~11
	13R22.5	156/150K		*	23.0	3	7~12
	1200R20	154/150K		*	23.0	2	7~12
80	295/80R22.5	152/148K		*	23.8	3	5~10
	315/80R22.5	156/150K		*	21.8	3	6~12



SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
95	325/95R24	162/160K		*	19.4	3	12~22



SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
95	1100R20	152/148K		*	20.0	3	10~12
95	325/95R24	162/160G		*	23.3	3	10~12



SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
	11R22.5	148/145G		*	25.0	4	14~16
	12R22.5	152/148G		*	25.0	4	14~16
	13R22.5	154/150K		*	24.0	4	14~16
80	315/80R22.5	156/150K		*	22.5	4	15~17
TUBE TYPE							
	1200R20	154/150G		*	24.0	4	14~16
	1200R24	156/153G		*	20.9	4	14~16

MIXED SERVICE (ON AND OFF-ROAD)



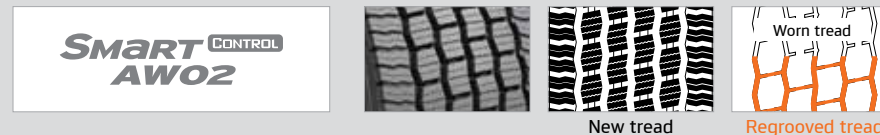
SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
65	385/65R22.5	160K (158L)		*	17.5	3	7-9



SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
65	385/65R22.5 *	160K(158L)		*	16.5	3	10~12

* available in Q2/2019

WINTER



SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
80	295/80R22.5	154/149M		*	16.5	3	9~11
	315/80R22.5	156/150L		*	17.0	3	8~10
70	275/70R22.5	150/145J		*	18	3	5~6
	315/70R22.5	154/150L		*	16.0	3	8~10
65	385/65R22.5	160K		*	15.5	3	8~10
55	385/55R22.5	160K (158L)		*	15.0	3	8~10

AW02+

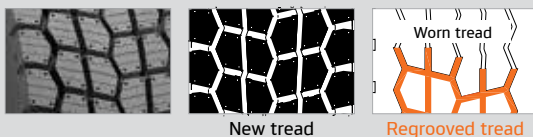
TUBELESS							
65	385/65R22.5	160K (158L)		*	15.5	3	8~10



SRS	Size	LI/SS	Type		Tread Depth m/m	Regrooving	
			T/T	T/L		Depth	Width
TUBELESS							
80	12R22.5	152/148L		*	19.5	3	A4~6 / B4~6
	315/80R22.5	156/150L		*	20.5	3	A5~7 / B4~6
	295/80R22.5	152/148L		*	20.5	3	A5~7 / B4~6
70	275/70R22.5	150/145J		*	18.4	3	3.5~5
	315/70R22.5	154/150L		*	17.5	3	A6~8 / B4~6

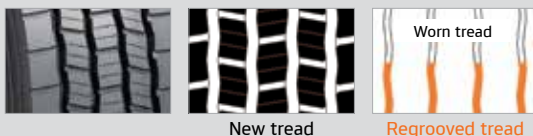
WINTER

DW06



SRS	Size	LI/SS	Type		Tread Depth	Regrooving	
			T/T	T/L	m/m	Depth	Width
TUBELESS							
80	295/80R22.5	152/148L		*	21.3	3	10~12
	315/80R22.5	156/150L		*	21.3	3	10~12
70	315/70R22.5	154/150L		*	21.3	3	10~12

**SMART CONTROL
TW01**



SRS	Size	LI/SS	Type		Tread Depth	Regrooving	
			T/T	T/L	m/m	Depth	Width
TUBELESS							
65	385/65R22.5	160K (158L)		*	12.1	3	9.5
55	385/55R22.5	160K/158L		*	14.1	3	9
45	445/45R19.5	160J		*	13.6	3	9

URBAN

**AU03 /
AU03+**

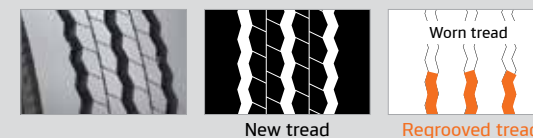


SRS	Size	LI/SS	Type		Tread Depth	Regrooving	
			T/T	T/L	m/m	Depth	Width
TUBELESS							
	11R22.5	148/145J		*	19.0	3	9~11
80	275/80R22.5	149/146J		*	19.0	3	9~11
	295/80R22.5	152/148J		*	19.0	3	9~11
70	245/70R19.5	136/134M		*	15.5	3	7~9
	265/70R19.5	140/138M		*	15	3	8~10

AU03+

TUBELESS							
70	275/70R22.5	150/145J (152/148)		*	20.5	3	9~11

**SMART City AU04
/AU04+**



SRS	Size	LI/SS	Type		Tread Depth	Regrooving	
			T/T	T/L	m/m	Depth	Width
TUBELESS							
70	275/70R22.5	150/148J (152/148F)		*	19	3	7~8
60	315/60R22.5	154/148J (156/152F)		*	13.1	3	7~8

AU04

TUBELESS							
	11R22.5	148/145J		*	20.2	3	9~11
80	295/80R22.5	152/148J		*	16.5	3	9~11